

#### FEDERAL LAW ENFORCEMENT WIRELESS USERS GROUP WASHINGTON, D.C.



September 29, 2003

Ms. Marlene Dortch, Secretary Federal Communications Commission TWA325 445 Twelfth Street, SW Washington, DC 20554

Re: Ex Parte Comments of the Federal Law Enforcement Wireless Users Group to the

Commission's Second Report and Order, In the Matter of Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies, WT Docket 99-87

Dear Ms. Dortch:

On behalf of the Federal Law Enforcement Wireless Users Group (FLEWUG) pursuant to Sections 1.1206(a) and 1.419 of the Commission's Rules, 47 C.F.R. §§ 1.1206 and 1.419 (2002), enclosed herewith in conformance with procedures for electronic filing is a copy of the FLEWUG's Ex Parte Comments in the proceeding referenced above.

Should you require any additional information, please contact the undersigned.

Respectfully submitted,

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U.S. Department of Homeland Security

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PSWN Program Manager

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Mac Smith

Acting PSWN Program Manager

# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

In the Matter of	)	
	)	
Implementation of Sections 309(j) and 337	)	WT Docket No. 99-87
of the Communications Act of 1934 as	)	
Amended	)	
	)	RM-9332
Promotion of Spectrum Efficient	)	
Technologies on Certain Part 90	)	
Frequencies	)	

## EX PARTE COMMENTS OF THE FEDERAL LAW ENFORCEMENT WIRELESS USERS GROUP TO THE SECOND REPORT AND ORDER

To: The Commission

Dated: September 29, 2003

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### EX PARTE COMMENTS OF THE FEDERAL LAW ENFORCEMENT WIRELESS USERS GROUP TO THE SECOND REPORT AND ORDER

1. The Federal Law Enforcement Wireless Users Group (FLEWUG)<sup>1</sup> respectfully submits the following comments to the Federal Communications Commission (Commission) in the above-styled proceeding.<sup>2</sup> Specifically, the FLEWUG requests that the Commission modify its Rules in several respects that will directly impact the continued interoperability of federal, state, and local public safety agencies and other first responders. The FLEWUG contends that although the migration to more efficient narrowband technology is both necessary and well

<sup>&</sup>lt;sup>1</sup> The FLEWUG is composed of law enforcement and public safety officials from the Department of Homeland Security, Department of the Treasury, Department of Justice, Department of the Interior, Department of Agriculture, Department of Defense, U.S. Postal Inspection Service, National Telecommunications and Information Administration, Internal Revenue Service, Federal Bureau of Investigation, U. S. Secret Service, U.S. Coast Guard, U.S. Capitol Police, Drug Enforcement Administration, U.S. Park Police, Bureau of Immigration and Customs Enforcement, Bureau of Customs and Border Protection, Bureau of Alcohol, Tobacco, Firearms, and Explosives, U.S. Mint, National Communications System, Defense Information Systems Agency, National Security Agency, Federal Law Enforcement Training Center, Bureau of Engraving and Printing, U.S. Marshals Service, National Institute of Standards and Technology, U.S. Forest Service, U.S. Fish and Wildlife Service, Federal Bureau of Prisons, Bureau of Land Management, and National Park Service.

<sup>&</sup>lt;sup>2</sup> Second Report and Order (Second R&O) and Second Further Notice of Proposed Rulemaking (Second FNPRM), In the Matter of Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies, WT Docket 99-87, February 25, 2003.

intended, the Commission's Rules will limit public safety communications by impeding technological improvements that could enhance interagency cooperation. The narrowband migration process must be gradual and should not leave public safety personnel isolated because their systems can no longer interoperate, especially when the technology to remedy this incompatibility already exists. The Commission's revised Rules would also inhibit communications between representatives of the public safety community, other first responders, and the Department of Homeland Security when the need for marshaling resources and promoting the exchange of information is most imperative. This outcome certainly does not serve the public interest and impermissibly jeopardizes domestic security.

#### I. INTRODUCTION

2. In this proceeding and other rulemaking dockets,<sup>3</sup> the Commission has urged the user community to improve spectral efficiency by adopting technologies that would permit economy of use and greater access through best engineering practices. The adoption of trunked communication technologies, strategies to improve spectrum reuse, and mobile solutions have all been employed in an effort to do more with the spectrum allocated for these critical services. The FLEWUG agrees in principle with the adoption of more efficient communication technologies and the need for a hard deadline to finalize the transition to 12.5 kilohertz (kHz) channels. Since all Federal Government agencies are already obligated by the National Telecommunications and Information Administration (NTIA) to complete mandatory

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<sup>&</sup>lt;sup>3</sup> See, e.g., In the Matter of Replacement of Part 90 By Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them and Examination of Exclusivity and Frequency Assignment Policies of the Private Land Mobile Services, PR Docket No. 92-235 (*Refarming Proceeding*); *The Spectrum Policy Task Force Report*, ET Docket No. 02-135, Section V, Key Elements of the New Spectrum Policy, Part D. Promoting Efficiency, November 15, 2002, at p. 21.

narrowbanding by January 1, 2005, for very high frequency (VHF) channels in the 162–74 megahertz (MHz) band, and by January 1, 2008, for VHF in the 138–150.8 MHz and ultra high frequency (UHF) channels in the 406.1–420 MHz bands;<sup>4</sup> the 2018 deadline for state and local peers to align corresponding systems to the narrowband standard could be realized.<sup>5</sup>

3. However, until the Commission's most recent determination, it consistently acknowledged that the migration from wideband 25 kHz technology to narrowband 12.5 kHz channels would be a gradual transition that would permit users of both types of systems to continue to communicate without interruption and allow for a transparent flow of communications. Under the revised Rules, agencies will be obliged to resort to *ad hoc* solutions that draw on limited technical resources and personnel, taking additional time to implement when it is most critical to respond quickly to prevent or contain irreparable damage.

#### II. STATEMENT OF INTEREST

4. The FLEWUG is a government wireless users organization dedicated to providing wireless communications for the greater protection of law enforcement and public safety

See NTIA Manual of l

<sup>&</sup>lt;sup>4</sup> See NTIA Manual of Regulations & Procedures for Federal Radio Frequency Management, rev. May, 2003, at Section 5.3.5.2, Standards for Fixed and Mobile Analog or Digital FM/PM Narrowband Operations (138–150.8, 162–174 and 406.1–420 MHz Bands).

The FLEWUG and the Public Safety Wireless Network (PSWN) Program each recommended in their respective Petitions for Reconsideration in this proceeding that the Commission consider *advancing* the proposed date for all non-federal public safety systems to comply with the narrowbanding mandate to more uniformly align systems operating below 512 MHz to the 12.5 kHz standard, and realize some possible advantages from economies of scale when a wider market for this equipment is created. *See* Petition by the Federal Law Enforcement Wireless Users Group For Reconsideration of the Commission's Second Report and Order, In the Matter of Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies (*FLEWUG Petition*), WT Docket 99-87, August 1, 2003, at para. 14; Public Safety Wireless Network (PSWN) Program Petition for Reconsideration of the Second Report and Order, In the Matter of Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies, WT Docket 99-87, August 1, 2003, at para.2.

personnel, improve mission effectiveness, and facilitate operational efficiency of law enforcement and public safety communications. From its inception, the FLEWUG has been a strong advocate of policies, procedures, and deployment of technology that would improve the ability of federal, state, and local public safety operations to coordinate resources and share information to provide a timely, appropriate response to emergencies, whether natural or manmade.

5. The FLEWUG was 1 of 18 interested parties that since March 1, 2003, have submitted a Petition<sup>6</sup> requesting that the Commission reconsider, clarify, or stay the adoption of its Rules pending reexamination of the deadlines imposed for the continued manufacture, importation, and deployment of equipment capable of operating with 25 kHz channels.<sup>7</sup> In its Notice and Comment proceedings on this docket, 65 filings have been submitted to the Commission since the new Rules were announced on February 25, 2003. The response has been almost uniformly in opposition to the adoption of these Rules. The FLEWUG has identified three primary issues that bear review before the Commission's Rules take effect: 1) the loss of backward compatibility between systems using wideband and narrowband technology, 2) the inability to expand the coverage contours of existing public safety communications systems, and 3) the lack of quality equipment to maintain and upgrade existing systems.

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<sup>&</sup>lt;sup>6</sup> See generally, FLEWUG Petition, WT Docket 99-87, August 1, 2003.

<sup>&</sup>lt;sup>7</sup> See Public Notice, Petitions for Reconsideration and Clarification of Action in Rulemaking Proceedings, WT Docket No. 99-87, September 3, 2003.

#### II. DISCUSSION

- A. Backward Compatibility Is Crucial in Enabling Federal, State, and Local Public Safety Operations to Communicate Effectively
- 6. The key to the continued cooperation and sharing of communications systems and mission-critical information is the ability of federal, state, and local public safety personnel to interoperate. With many disparate communications technologies provided by numerous competing hardware and infrastructure vendors, public safety communications officials have a variety of systems to choose from to meet their specific needs. The Commission endorsed the Project 25 standard (P25) for public safety communications for the designated interoperability channels in the 700 MHz band. In addition, most federal agencies, including the Department of Homeland Security, Department of Justice, and the Department of Defense have specified that radios purchased by those agencies must be P25 compliant. The Commission's revised Rules directly disrupt the orderly migration to P25 and ultimately to Phase II, including the two-slot time division multiple access (TDMA) technology by mandating that 12.5 kHz and 6.25 kHz technology be adopted, without providing accommodation for equivalent spectrally efficient alternatives, as are permitted under the current interoperability standard.
- 7. The Commission's new Rules divest law enforcement and public safety communications users of the ability to use the equipment already available to bridge the gap between wideband

<sup>&</sup>lt;sup>8</sup> See In the Matter of the Development of Operational, Technical and Spectrum requirements for Meeting Federal, State, and Local Public Safety Agency Communications Requirements Through the Year 2010, Fourth R&O, WT Docket 96–86, January 11, 2001, at paras 69–72.

<sup>&</sup>lt;sup>9</sup> See Petition for Reconsideration and Clarification of Motorola, Inc. (*Motorola Petition*), WT Docket No. 99-87, August 18, 2003, at p. 13. "[T]he Second Report and Order removed the ability of manufacturers to submit "equivalent efficiency" designs that offer two voice paths over a 12.5 kHz channel width without having a discrete 6.25 kHz mode." *Id. See also* Petition for Reconsideration of the Second Report and Order by M/A-COM, Inc. (*M/A-COM Petition*), WT Docket No. 99-87, August 18, 2003, at p. 9.

25 kHz technology and new 12.5 kHz systems. Federal users that rely on the assistance of state and local first responders, many of whom are volunteers without the means to replace legacy communications equipment, will be forced to expend more staff resources and force agents/officers to use their ingenuity to establish contact with non-federal personnel, despite the fact that a simple solution is already in place. The Commission deeply undercuts the existing capacity for interoperable communications by preventing continued access to efficient and available means to leverage that interagency support.

8. Manufacturers and equipment developers that work with the public safety community have also observed that 6.25 kHz equipment and infrastructure are not yet available for deployment, and reliance on this capability to develop in anticipation of the migration to a narrowband standard is premature. In the meantime, the Rules will also have the consequence of greater incurred costs for all federal, state, and local agencies that had previously been able to purchase commercial off-the-shelf (COTS) solutions compatible with the P25 standard. The user community had the luxury to implement state-of-the-art digital technology in a phased implementation to distribute costs across multiple budget years, while maintaining compatibility with existing 25 kHz equipment. To facilitate a uniform transition, the FLEWUG also reasserts that the Commission should consider making the deadline for transition to 12.5 kHz technology for public safety users 2013, the same date as for non-public safety licenses. Public safety users

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<sup>&</sup>lt;sup>10</sup> See Motorola Petition, WT Docket No. 99-87, August 18, 2003, at p. 11; M/A-COM Petition, WT Docket No. 99-87, August 18, 2003 at p. 15.

<sup>&</sup>lt;sup>11</sup> See Requests for Clarification and Reconsideration and Comments on the Second Further Notice of Proposed Rulemaking by the National Telecommunications and Information Administration (*NTIA Petition*), WT Docket No. 99-87, August 13, 2003, at p. 5.

may benefit from advantageous pricing for new narrowband equipment and will be isolated from those migrating to the narrowband standard for a shorter period of time.

### B. Public Safety Users Must Have the Opportunity to Enhance System Coverage Contours Using All Available Equipment

- 9. The FLEWUG further asserts the need for law enforcement and public safety licensees to improve the coverage of existing systems. The Commission's new Rules would prevent any expansion of coverage areas for those users unless the equipment operates using channels of 12.5 kHz or less. These agencies are presented with the hard choice of completely replacing their systems well in advance the January 1, 2018 deadline or experiencing diminished coverage and reliability as changes in area topography, architecture, and competing wireless applications continue to create interference and reduce communication quality. Not only will the agencies already operating on limited budgets be further handicapped by this decision, but the manufacturers and developers will also lose considerable investments made in good faith reliance on the Commission's prior efficiency requirements as articulated in the Refarming proceeding.<sup>12</sup>
- 10. Furthermore, the Commission's revised Rules would prevent any agencies that have already migrated to 12.5 kHz technology from communicating with 25 kHz systems because the manufacture and importation of dual-mode equipment that has a wideband capability is prohibited after January 1, 2008. Also, the FLEWUG notes that federal public safety agencies rely on the availability of COTS equipment that is type-certified by the Commission to enhance

<sup>&</sup>lt;sup>12</sup> See M/A-COM Petition, WT Docket No. 99-87, August 18, 2003, at p. 3.

the coverage of their systems. The Commission's revised Rules would have a detrimental effect upon the ability to quickly obtain compatible equipment and deploy hardware for use in a timely manner. For all practical purposes, the Rules will drive a wedge between federal and non-federal agencies that have not transitioned to the new standard, losing the advances that have been made over the last several years under difficult circumstances.

#### C. Public Safety Operations Must Be Able to Maintain and Upgrade Communications **Systems**

- 11. Several of the responding parties in this proceeding have noted the need for maintenance and repair of the systems already deployed in the field. By imposing a ban on the development and importation of dual-mode equipment, the Commission limits law enforcement and public safety resources to the equipment manufactured prior to the January 1, 2008, deadline. For 10 years after this deadline, a dwindling supply of used wideband equipment will be available to make necessary equipment repair and replacement. The FLEWUG concurs with M/A-COM that the Commission's Second R&O in this docket is clearly inconsistent with the Orders in the Refarming proceeding, <sup>13</sup> asserting that the Commission had allowed manufacturers flexibility in determining how spectral efficiency is best realized, and arguing persuasively that the Commission's decision in the Second R&O clearly adopts a policy that favors one technical solution over another.<sup>14</sup>
- M/A-COM also observes that "although the instant proceeding is independent of the 12 *Refarming* proceeding...the rules adopted in the instant proceeding are intended to supplement

<sup>&</sup>lt;sup>13</sup> *Id.*, at p. 4. <sup>14</sup> *Id.*, at p. 8.

the rules adopted in the *Refarming* proceeding" and concludes that "these new rules may frustrate realization of spectrally efficient use of the 150-174 MHz and 450-512 MHz land mobile radio bands." The FLEWUG agrees that the Commission's Rules should be consistent and not contradictory, because of the interdependency of spectrum users, as well as the manufacturers and developers that serve them, due to the various bands in which allocations have been made for their respective services. Also, as the NTIA points out in its filing, the 162– 174 MHz band is allocated for Federal Government operations and is therefore not within the scope of the Commission's authority. 16 However, the Federal Government users are dependent on the same technology and cost barriers experienced by their local, state and tribal counterparts. This ruling will have a significant impact on not only interoperability, but on implementation costs due to the inability to develop phased implementation solutions.

13. In addition, the Commission's ruling would restrict law enforcement and public safety personnel from taking advantage of new applications or improvements in wireless communications technology until the transition to narrowband operation is complete. Without a ready market for wideband equipment, manufacturers have no incentive to develop capabilities that can enhance and complement existing equipment. Other services, including critical infrastructure that provide "core business services (i.e., the delivery of energy water, and basic quality of life services to the public)" would be compromised as well, due to the Commission's aggressive implementation schedule.<sup>17</sup>

 <sup>15</sup> Id., at p. 4.
16 See NTIA Petition, WT Docket No. 99-87, at p. 3.

<sup>&</sup>lt;sup>17</sup> See The American Petroleum Institute and the United Telecom Council Petition for Reconsideration, WT Docket No. 99-87, August 18, 2003, at p. i.

#### IV. CONCLUSION

14. The FLEWUG thanks the Commission for the opportunity to contribute its opinions and recommendations for policies that would promote improved communications operations for the law enforcement and public safety communities. The FLEWUG asks the Commission to review its Rules in this docket to ensure that as more efficient wireless communications technologies are adopted, the need for continued reliable and interoperable communications is not sacrificed in the process.

Respectfully submitted,

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Julio "Rick" Murphy

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PSWN Program Manager

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Acting PSWN Program Manager

McRae Smith

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### **CERTIFICATE OF SERVICE**

I, David E. Pickeral, Associate, Booz Allen Hamilton, 8283 Greensboro Drive, McLean, Virginia, 22102–3838, do hereby certify that on this date I caused to be served, by electronic filing and first-class mail, postage prepaid, the Federal Law Enforcement Wireless Users Group's Ex Parte Comments to the Commission's Second Report and Order, *In the Matter of Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies*, the original of which is filed herewith and upon the parties identified on the attached service list.

DATED at Fair Oaks, Virginia this 29th day of September 2003.

David E. Pickeral

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#### **SERVICE LIST**

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